UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES
BIOLOGICAL LABORATORY
P. O. BOX 6121, PT. LOMA STATION
SAN DIEGO 6, CALIFORNIA

Sea-surface Temperature Charts, Eastern Pacific Ocean
February 1960

Prepared by

The Staff of the Bureau of Commercial Fisheries
Biological Laboratory, San Diego, California

The Tropical Temperature Charts

We wish to remind fishermen and scientists who make use of the monthly sea-surface temperature charts that their preparation is made possible by the generous cooperation of the organizations and individuals who collect and make the thousands of temperature readings available to the Bureau of Commercial Fisheries. Main source of the temperature data is the United States Weather Bureau which routinely receives weather messages from ships at sea.

The Weather Bureau's excellent coverage of the temperate eastern Pacific Ocean permits preparation of the detailed contoured chart of this region as well as anomaly charts which show temperature deviations from the 30-year mean and the previous year. We are presently unable to prepare charts of the same detail for the area of the tropical eastern Pacific, either to the north or south of the equator. Here, the Weather Bureau's coverage is not as good because fewer merchant and naval vessels operate in the region, transmission of weather reports is apparently more difficult, and there is no regular radio weather reporting by merchant ships south of the equator between the coast of South America and 120°W longitude.

Several interested agencies, including the Bureau of Commercial Fisheries, are hopeful that eventually a suitable coastal radio station in the Canal Zone or elsewhere will be designated to receive weather reports from south of the equator. Such a station would also improve coverage immediately to the north of the equator. However, this possibility is not likely to be realized for some time. In the meanwhile, we are continuing to enlist the cooperation of many organizations, individuals, and particularly fishermen to improve coverage from the tropical area. We wish to encourage fishermen, especially more of our tropical tuna fishermen, to take weather observations and to transmit them to the Weather Bureau. As the coverage from the tropical region improves, so will the usefulness of the temperature charts in fishing operations.

Gerald V. Howard
Laboratory Director

Acknowledgments

The following organizations and stations contributed data for the February 1960 charts:

U. S. Weather Bureau, San Diego, California
U. S. Navy Fleet Weather Facility, North Island, San Diego, California
U. S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U. S. Coast Guard, Port Hueneme Light Station, Port Hueneme, California
Hopkins Marine Station, Pacific Grove, California, by J. P. Balesteri
Inter-American Geodetic Survey by Jose Lanchimba at La Libertad, Ecuador, Gualberto Tapia at San Cristobal, Galapagos, V. E. Castillo at Tumaco, Colombia, L. Lynch at Pt. Armuelles, Panama, Romeo Valencia at Pt. San Jose, Guatemala, Rene Cortes at Salina Cruz, Mexico, David Ortega at Manzanillo, Mexico and L. Meza at Tulara, Peru
Inter-American Tropical Tuna Commission, La Jolla, California
Newport Beach Life Guard Service, Balboa, California, by R. L. Moore
Scripps Institution of Oceanography, La Jolla, California, by Margaret Robinson and Hans Klein
Ships HMCS Sussexvale, Frances Salman, Trolleggen and Captain Tomter of the Santa Maria

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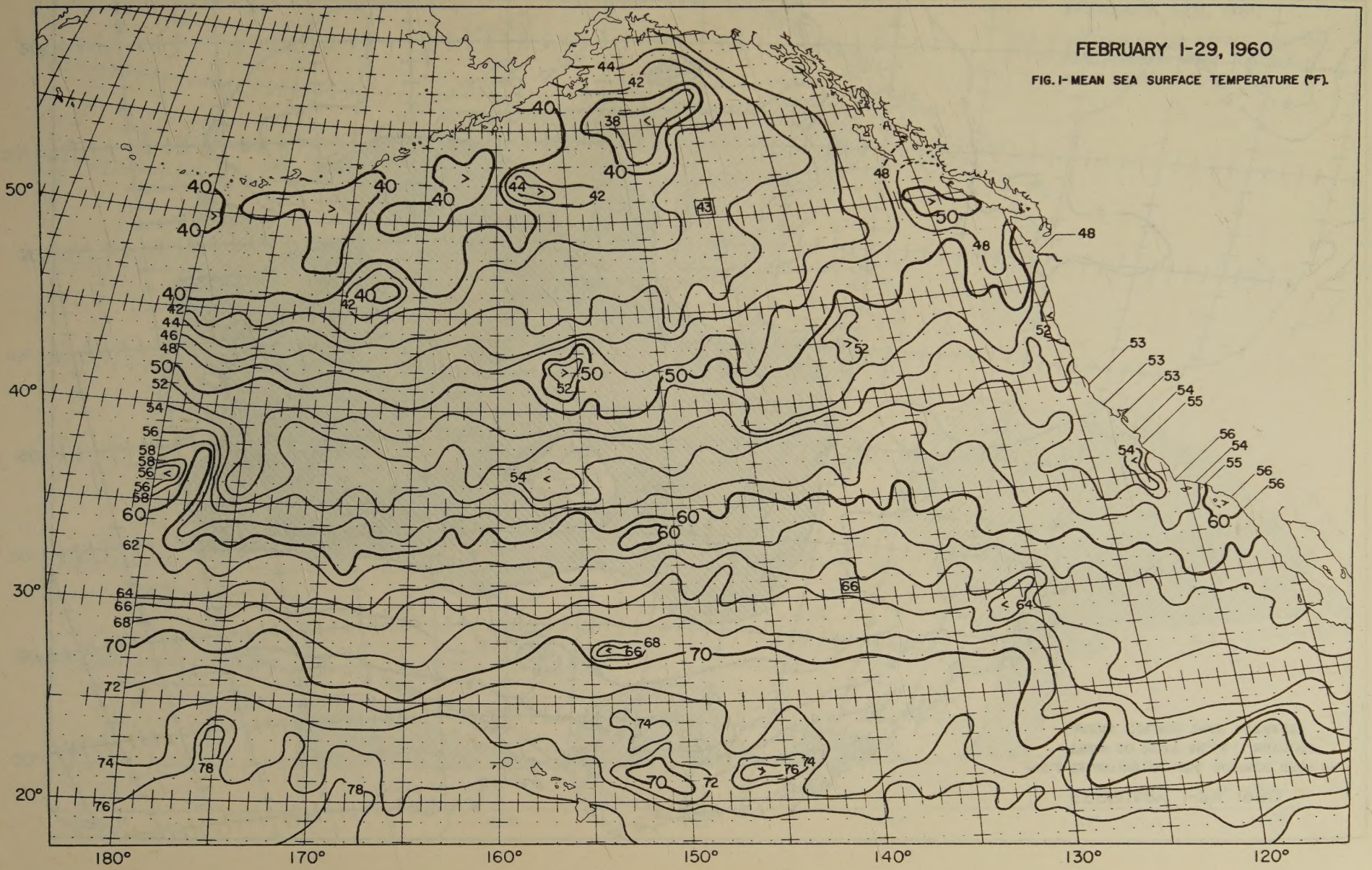
Figure 1.--Mean sea-surface temperatures (°F) derived from approximately 8000 observations. Squares show temperature at weather-ship stations. Numerals on shore are temperatures at coastal and light stations.

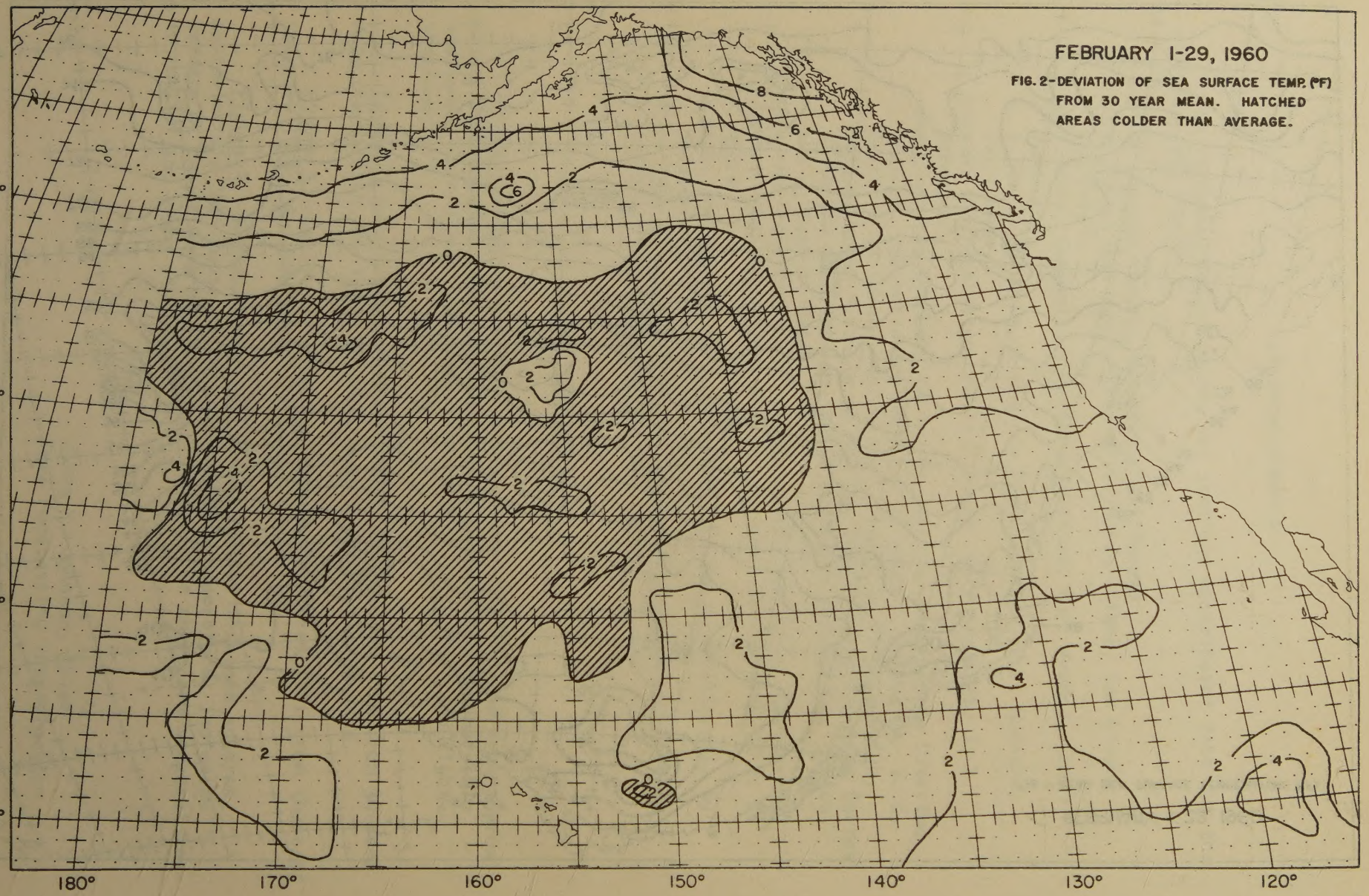
Figure 2.--Deviation of sea-surface temperatures (°F) from 30-year mean charts of H. O. 225. Hatched areas are colder than mean.

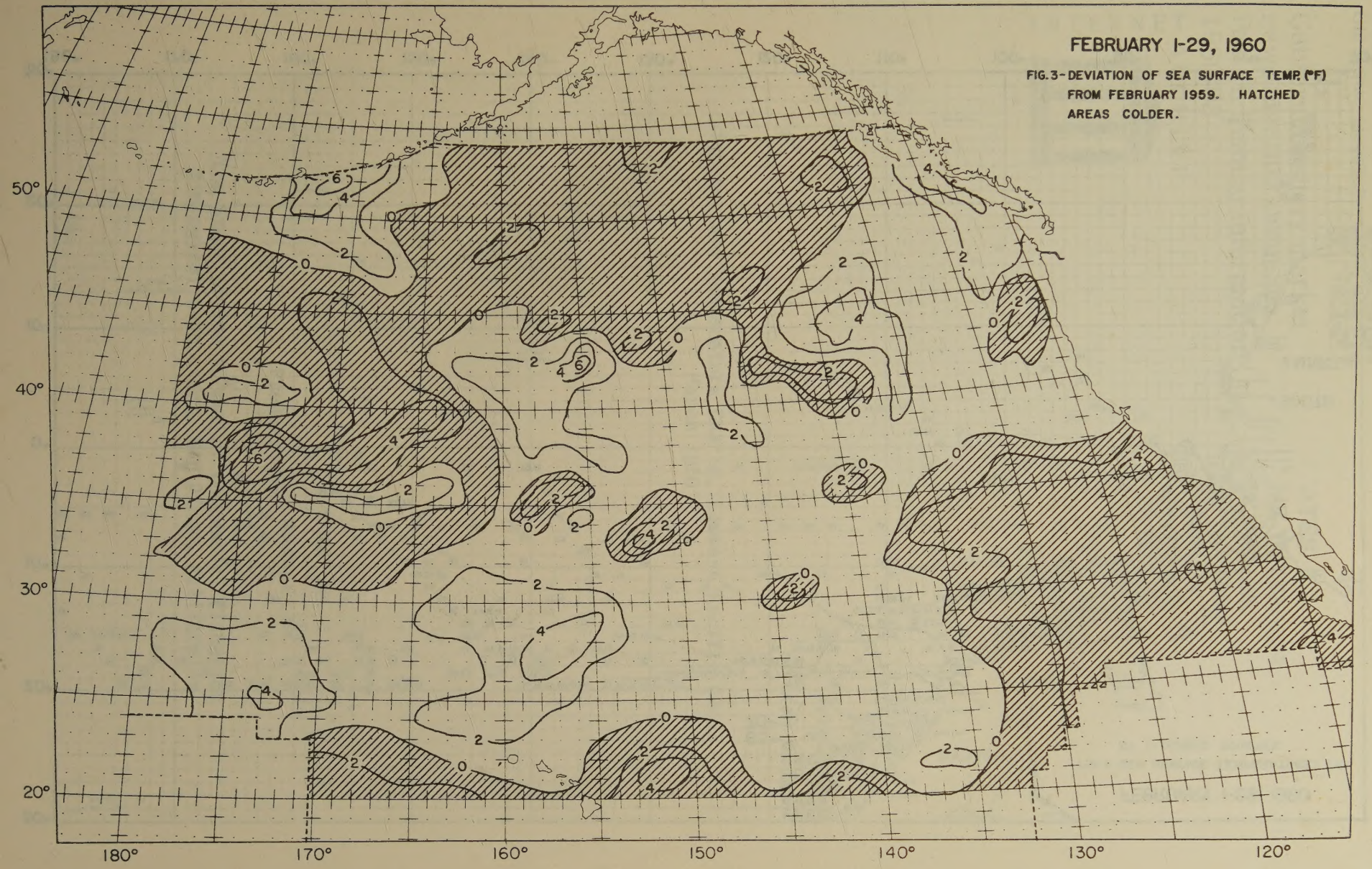
Figure 3.--Deviation of sea-surface temperatures (°F) from those of February 1959. Hatched areas are colder than 1959.

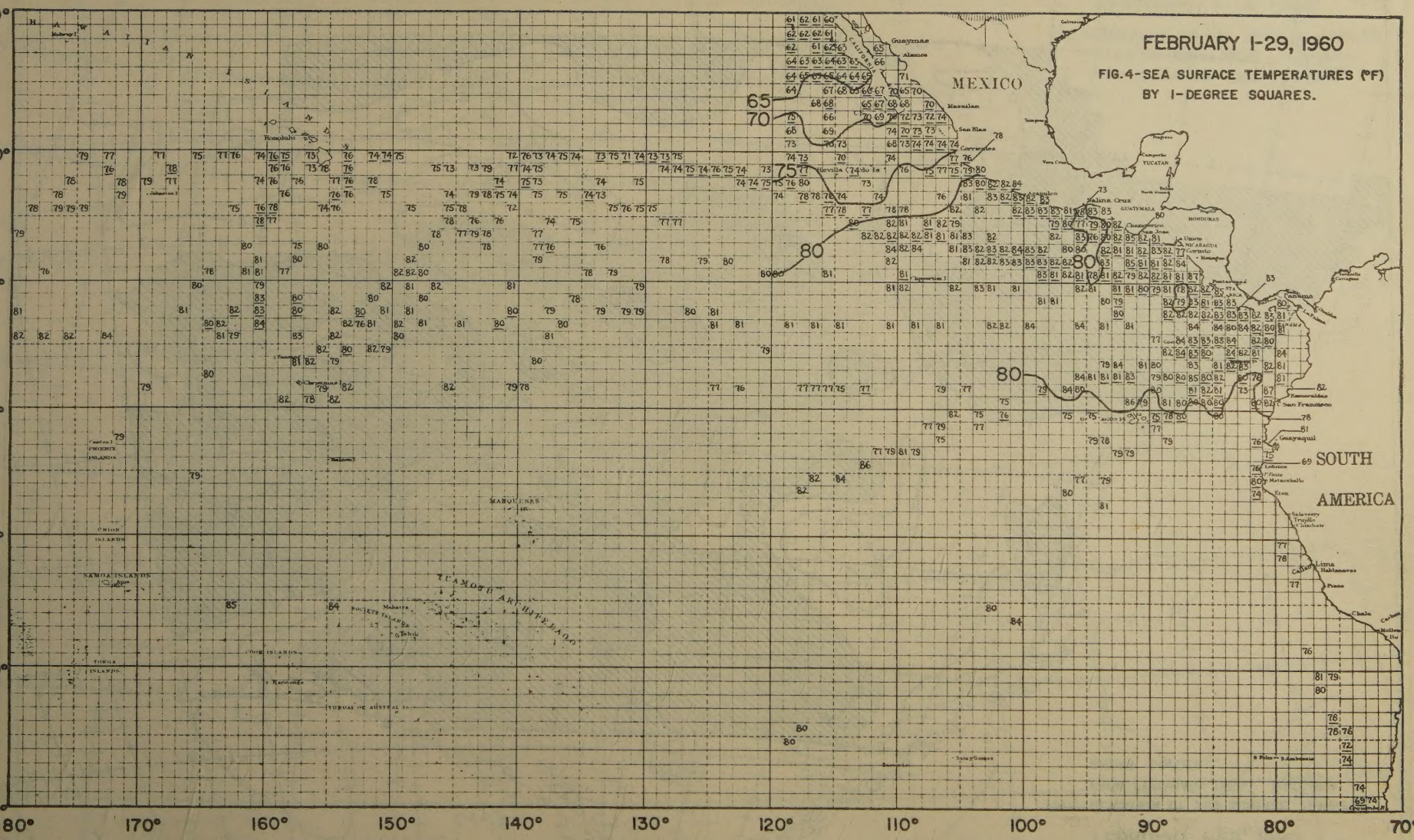
Figure 4.--Sea-surface temperatures (°F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal and light stations.

James H. Johnson, Chief
Tuna Forecasting Investigation


FEBRUARY 1-29, 1960
FIG. 1- MEAN SEA SURFACE TEMPERATURE (°F).
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


FEBRUARY 1-29, 1960
FIG. 2-DEVIATION OF SEA SURFACE TEMP. (°F) FROM 30 YEAR MEAN. HATCHED AREAS COLDER THAN AVERAGE.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


FEBRUARY 1-29, 1960
FIG. 3 - DEVIATION OF SEA SURFACE TEMP. (°F) FROM FEBRUARY 1959. HATCHED AREAS COLDER.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


FEBRUARY 1-29, 1960
FIG.4-SEA SURFACE TEMPERATURES (°F)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
65
70
75
80
80
80
30°
20°
10°
0°
10°
20°
30°
180°
170°
160°
150°
140°
130°
120°
110°
100°
90°
80°
70°